504949374 06/07/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4996121

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUXIN WEI	06/05/2018
HIDEJI WAKABAYASHI	05/10/2018
SHINICHIRO TSUDA	05/14/2018

RECEIVING PARTY DATA

Name:	SONY CORPORATION
Street Address:	1-7-1 Konan, Minato-ku
City:	Tokyo
State/Country:	Japan
Postal Code:	108-0075

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16060193

CORRESPONDENCE DATA

Fax Number: (703)413-2220

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (703) 413-3000 Email: etadic@oblon.com **Correspondent Name:** OBLON, ET AL. Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	513577US
NAME OF SUBMITTER:	EMIRA TADIC
SIGNATURE:	/Emira Tadic/
DATE SIGNED:	06/07/2018

Total Attachments: 3

source=513577usAssignment#page1.tif source=513577usAssignment#page2.tif source=513577usAssignment#page3.tif

> **PATENT REEL: 046015 FRAME: 0390** 504949374

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Ittle of TELECOMMUNICATIONS APPARATUS AND METHODS Invention
As the below named inventor, I hereby declare that:
This declaration The attached application, or
is directed to: United States application or PCT international application number PCT/EP2016/080695 filed on 12 December 2016
The above-identified application was made or authorized to be made by me.
believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Sony Corporation Thereinafter referred to as "ASSIGNEE") having places of business at: 1-7-1 Konan, Minato-ku, Tokyo, 108-0075 Iapan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letter Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, for good and valuable consideration which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the international Convention and other relevant International Treaties and Arrangements from the aforesaid application and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me especting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said needs on the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
EGAL NAME OF INVENTOR
nventor: WEI, Yuxin Date: DS/M/22//
· · · · · · · · · · · · · · · · · · ·

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 046015 FRAME: 0391

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of TELECOMMUNICATIONS APPARATUS AND METHODS Invention
As the below named inventor, I hereby declare that:
This declaration [] The attached application, or
is directed to: United States application or PCT international application number PCT/EP2016/080695 filed on 12 December 2016.
The above-identified application was made or authorized to be made by me.
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Sony Corporation (hereinafter referred to as "ASSIGNEE") having places of business at: 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, for good and valuable consideration which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: WAKABAYASHI, Hideji Date: 10/May/20[8
Signature: Nowash

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 046015 FRAME: 0392

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of TELECOMMUNICATIONS APPARATUS AND METHODS Invention
As the below named inventor, I hereby declare that:
This declaration The attached application, or
is directed to: United States application or PCT international application number PCT/EP2016/080695 filed on 12 December 2016
The above-identified application was made or authorized to be made by me.
believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
WHEREAS, Sony Corporation (hereinafter referred to as "ASSIGNEE") having places of business at: 1-7-1 Konan, Minato-ku, Tokyo, 108-0075, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, for good and valuable consideration which is hereby acknowledged, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.
LEGAL NAME OF INVENTOR
Inventor: TSUDA, Shinichiro Date: 14th May, 2018

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 046015 FRAME: 0393

RECORDED: 06/07/2018